

Thorshaven in the Faroe Islands, and the Haaf banks on the east of Shetland; also in jar No. 25=374 of 1870, near Cape St. Vincent. The finest and most perfect specimens that I have ever seen are those from the Haaf banks, presented to the British Museum by Dr. Bowerbank.

*Phakellia* (Bk.) *infundibuliformis*, C., = *Halichondria inf.*,  
Johnston.

Entire specimens and fragments of this sponge appear in jars 65, 78, and 83, which, being the numbers of the stations where they were respectively dredged up, indicate a depth varying from 290 to 345 fathoms, with a locality between the Orkney, the Shetland, and the Faroe Islands.

This sponge in general form is very like, although much inferior in size to, *Phakellia ventilabrum*—indeed just as Johnston has described it; and I can see no reason for altering any thing but Johnston's generic name to "*Phakellia*," and not to "*Isodictya*" as Dr. Bowerbank has done. The spicules are essentially those of *Phakellia ventilabrum*, viz. an acuate and an acerate; but they are shorter, stouter, and straighter than those of the latter, the acerate being simply curved, and not undulating as in *P. ventilabrum*. Outlines of two specimens of *P. infundibuliformis* in its fan-shaped form may be seen *in situ* on the pebble on which they have grown (Pl. XII. fig. 1, *fff*).

[To be continued.]

XXI.—On a Collection of Lepidoptera from Port Moresby,  
New Guinea. By ARTHUR G. BUTLER, F.L.S. &c.

THE following species were recently received from Mr. W. Y. Turner of the London Medical Mission at New Guinea, and form a very interesting little collection. Most of the named species were previously known from Aru, only one or two of the commoner and more widely ranging species being identical with those of Australia.

RHOPALOCERA.

Family Nymphalidæ.

Subfamily DANAINÆ, Bates.

Genus DANAIIS, Latreille.

1. *Danais ferruginea*, n. sp.

Allied to *D. mytilene*, but the transverse, oblique, subapical

white band composed of large semiconnected spots as in *D. philene*; the ground-colour of the wings much darker on both surfaces. Expanse of wings 3 inches 1-5 lines.

Two males.

2. *Danaïs leucoptera*.

*Danaïs leucoptera*, Butler, Ent. Mo. Mag. xi. p. 163 (1874).

One female.

Genus EUPLÆA, Fabricius.

3. *Euplæa resarta*, n. sp.

Ground-colour of *E. Lapeyrousei*, blackish piceous, purplish in certain lights; the borders and the abdominal and anal areas of secondaries lighter, cupreous, greyish towards outer margin; primaries with a transverse series of eleven discal whitish spots, five of them strigiform, subcostal, the sixth and seventh hastate, subapical, the remainder rounded, well separated, bifid; secondaries with an increasing series of twelve, oval, whitish, discal spots, and a less-defined submarginal series of whitish dots: wings below paler than above, especially round the borders; primaries with four lilacine dots, one in the cell and three beyond it; discal spots as above, but white; several submarginal dots in pairs; secondaries with a spot in the cell and five dots in an angular series beyond it lilacine; discal and submarginal spots as above, but the latter edged with brown: body black, spotted with white. Expanse of wings 3 inches 7 lines.

One female.

A very distinct species, allied to *E. Lapeyrousei*, but with the aspect of *E. vermiculata*.

4. *Euplæa Lapeyrousei*.

*Euplæa Lapeyrousei*, Boisduval, Voy. Astr. Lép. p. 97 (1832).

*Euplæa Batesii*, Felder, Reise der Nov. Lep. ii. p. 331 (1867).

Two females.

*E. Lapeyrousei* was not previously in the Museum; the small species hitherto representing it in the collection proves to be quite distinct; it is of the form and size of *E. sepulchralis*, with the coloration of the *E.-melina* group. It may take the name proposed for it by Dr. Boisduval, *E. Paykullei*.

5. *Euplæa mæsta*.

*Euplæa mæsta*, Butler, P. Z. S. p. 284, fig. 3 (1866).

Three males.

The bluish submarginal spots in primaries are more frequently absent than present.

6. *Euplœa lugens*, n. sp.

Wings above deep piceous with purple reflections; external area paler; costal area of secondaries broadly greyish brown; primaries with a falciform series of nine chalky-white discal spots; the fourth, fifth, seventh, and eighth larger than the others, the ninth bifid; secondaries with a subangulated discal series of ten chalky-white spots, the first three increasing in size, rounded, and widely separated, the remainder larger, oval, in pairs: wings below olive-brown; primaries with the interno-discal area blackish, a bluish dot in the cell and two on the median interspaces; white spots as above; secondaries with a bluish dot in the cell, and an angular series of five dots beyond it; white spots as above: body black, white-spotted. Expanse of wings 3 inches 2 lines.

One male.

Seems to belong to the *E.-pelor* group; but it is very different.

## Genus CALLIPLŒA, Butler.

7. *Calliplœa violetta*, n. sp.

Wings above piceous, shot with purple, paler towards the outer margins; primaries with a waved series of eight discal lilac spots with diffused white centres, the first three and the last small, the fourth largest; secondaries sometimes with two subapical white dots parallel to the outer margin: wings below bronzy olive, becoming brownish plum-coloured towards the outer margin; primaries with the discal series of spots white and smaller than above; a bluish dot in the cell, and three in a nearly straight line beyond it; eight submarginal white dots in pairs; a white interno-median streak; secondaries with a bluish dot in the cell, and six in an angular series beyond it; two or three subapical, and two smaller submarginal white dots: body black, white-spotted. Expanse of wings 3 inches 1 line.

Two females.

## Subfamily SATYRINÆ, Bates.

## Genus MELANITIS, Fabricius.

8. *Melanitis taitensis*.

*Cyllo leda*, var. *taitensis*, Felder, Verh. zool.-bot. Gesellsch. in Wien, xii. (1862).

A male.

Genus MYCALESIS, Hübner.

9. *Mycalesis medus*.

*Pupilio medus*, Fabricius, Syst. Ent. p. 488 (1775).

Both sexes.

10. *Mycalesis daidis*.

*Mycalesis daidis*, Hewitson, Exot. Butt. iii. *Myc.* pl. 4. fig. 22 (1862).

One female.

11. *Mycalesis flagrans*, n. sp.

Allied to *M. terminus*, from which it differs above in having the primaries much more deeply coloured, the ochraceous patch surrounding the inferior ocellus much smaller, the outer border less irregular; secondaries greyish brown, the ocelli and marginal lines as in *M. terminus*: wings below much more grey in colouring, the ocelli slightly larger, bounded within by greyish instead of clear pale buff; the submarginal lines less undulated, the outer line closer to the margin and consequently further from the inner line. Expanse of wings 2 inches.

One female.

Although this species upon the upper surface merely looks like a deeply coloured variation of *M. terminus*, the grey coloration of the under surface with the differently disposed submarginal lines at once decide it to be a distinct species.

Subfamily NYMPHALINÆ, Bates.

Genus NEPTIS, Fabricius.

12. *Neptis Brebissonii*?

*Limnitis Brebissonii*, Boisduval, Voy. de l'Astrol. Lép. p. 132. n. 2 (1832).

One male.

The only point in which this differs from the description is in that the upper discal white patch of primaries is divided into two spots as in *N. venilia*; the outer series of white spots on the under surface of secondaries is also obsolete; but this is certainly a male character; the female would have them well-defined as in *N. venilia*.

Genus DIADEMA, Boisduval.

13. *Diadema nerina*.

*Pupilio nerina*, Fabricius, Syst. Ent. iii. 1, p. 509 (1775).

One male, two females.

## Genus JUNONIA, Hübner.

14. *Junonia albicincta*.

*Junonia albicincta*, Butler, Trans. Ent. Soc. p. 5 (1875).

One male.

Previously known only from Australia.

15. *Junonia villida*.

*Papilio villida*, Fabricius, Mant. Ins. ii. p. 35 (1787).

One female.

## Genus CYRESTIS, Boisduval.

16. *Cyrestis achates*.

*Cyrestis achates*, Butler, Proc. Zool. Soc. p. 481 (1865).

One female.

The type was from Mysol.

## Genus MESSARAS, Doubleday.

17. *Messarás Turneri*, n. sp.

Wings with basal area red-brown; central area occupied by a broad, sharply defined, bright ochreous band (from costa of primaries to abdominal margin of secondaries), sometimes enclosing a black dot on first median interspace of primaries; external area broadly black-brown, with two barely visible lunulate submarginal black lines: wings below intermediate in character between *M. proscopé* and *M. madestes*, buff, with the basal area greyish or sordid (not edged with brown); external area red-brown, interrupted by a discal series of black spots, bounded by whitish lunules on each side; a submarginal series of whitish lunules; a nearly marginal ochraceous line: body brown above, buff below. Expanse of wings 2 inches 5-6 lines.

A pair.

We had this species previously from Mysol and Dorey; the example from Mysol is rather paler.

## Family Lycænidæ.

## Subfamily LYCÆNINÆ, Butler.

## Genus MILETUS, Hübner.

18. *Miletus epicletus*.

*Thecla epicletus*, Felder, Wien. ent. Mon. iii. p. 324, pl. vi. fig. 3 (1869).

A pair.

19. *Miletus protogenes*?

*Hypochrysops protogenes*, Felder, Reise der Nov. Lep. ii. p. 255. n. 301 (1867).

One female.

The description of this species is difficult to follow, the character of the bands of the secondaries below being ill-expressed; but, so far as I can make out, the above example seems to be Felder's species. The hind wings below are white with four bands:—the first three crossing the wing, ferruginous, with metallic green borders, the third band very irregular and blotched with black; the fourth band marginal, orange, intersected by a metallic green line.

Genus HOLOCHILA, Felder.

(*Cupido*, part., Kirby.)

20. *Holochila intensa*, n. sp.

♂. Brilliant cobalt-blue; primaries with the costa, apical area, and outer margin black-brown; secondaries with the borders black-brown; antennæ black, annulated with white, tipped with orange; wings below snow-white. Expanse of wings 1 inch 2 lines.

♀. Greyish brown; basal half of median interspaces white; a cuneiform patch from near the base to the white spot silvery blue; wings below snow-white. Expanse of wings 1 inch 3 lines.

Two males.

The examples from New Guinea being much rubbed, I have taken the above description from Aru specimens previously in the collection.

Genus DANIS, Fabricius.

21. *Danis aleuas*.

*Lycæna aleuas*, Felder, Reise der Nov. Lep. ii. p. 268, pl. xxxiii. figs. 15, 16 (1867).

One male and two females.

22. *Danis nemophila*, n. sp.

♂. Wings above silvery blue; outer margins black-brown; a broad snow-white band from abdominal margin of secondaries to third median branch of primaries; costa of primaries narrowly white, with a brown external edge; wings below dark smoky grey; a broad white band as above; primaries

with a spot at end of cell, a subcostal spot, a transverse sub-apical band, and a sinuated chain-like marginal band, indicated by white marginal lines, the chain-like band doubled at apex; secondaries with a discal irregular transverse series of subquadrate white-edged blackish spots, six elongate-lunate submarginal black spots edged with pale blue and white, the fifth with two external metallic blue dashes, a white interrupted marginal line, fringe dark grey. Expanse of wings 1 inch 8 lines.

♀. Differs from the male in the broad black-brown borders of the wings above. Expanse of wings 1 inch 8 lines.

One pair.

We previously possessed this species from Waigiou; it is larger than the allied *D. aleuas*, and differs in the want of the metallic discal lunules on the underside.

Subfamily *THECLINÆ*, Butler.

Genus *HYPOLYCÆNA*, Felder.

23. *Hypolycæna tmolus*.

*Hypolycæna tmolus*, Felder, Wien. ent. Mon. vi. p. 293 (1862).

Two females.

Genus *AMBLYPODIA*, Horsfield.

24. *Amblypodia micale*.

*Arhopalia micale*, Blanchard, Voy. Pôle Sud, p. 399, pl. iii. figs. 11, 12 (1853).

One male in poor condition.

Family *Papilionidæ*.

Subfamily *PIERINÆ*, Bates.

Genus *ELODINA*, Felder.

25. *Elodina andropis*, n. sp.

Wings snow-white, base broadly greyish brown; primaries with costa, apex, and external border dark brown, inner edge of outer border zigzag, trisinuate, the second sinus feebly bisinuate; secondaries with a broad internally subsinuated dark brown marginal border, diffused at anal angle; body blackish: primaries below silvery white, the costal and outer margins narrowly grey; a broad bisinuated subterminal

transverse blackish band; basal area pale sulphur-yellow; secondaries silvery white, the base of costa sulphur-yellow; body below white. Expanse of wings 1 inch 9 lines.

One female.

Not nearly allied to any species known to me.

Genus BELENOIS, Hübner.

26. *Belenois latilimbata*, n. sp.

♂. Creamy white, basal area greyish; a broad and rather irregular dark brown outer border; primaries with the veins dusky; costa black, tapering towards the base; two or three subapical creamy spots; outer border deeply sinuated in the first median and the discoidal interspaces: primaries below white; outline of outer border as above, but the apical area cupreous, crossed by three bright yellow spots, basal area greenish yellow; secondaries bright yellow; external border irregularly sinuated, cupreous, darker internally. Expanse of wings 2 inches 4 lines.

♀. Primaries whiter than in the male, several indistinct additional subapical spots, the two more prominent ones distinctly yellow; secondaries with an indistinct subapical spot: underside paler. Expanse of wings 2 inches 5 lines.

One pair.

Most nearly allied to *B. nabis*, but differing considerably.

Subfamily PAPILIONINÆ, Bates.

Genus EURYCUS, Boisduval.

27. *Eurycus troilus*, n. sp.

Allied to *E. cressida* ♂, but with shorter and more rounded primaries, external blackish border much broader, particularly at apex; basal black area and inner discoidal black spot obsolete, indicated by pale brown as in *E. cressida* ♀, transverse white band of secondaries externally more deeply indented; discal spots very small, sordid white instead of carmine: on the underside the spots are tinted with red; white marginal spots below wanting: body altogether duller in colour, collar below pinky whitish. Expanse of wings 3 inches 4 lines.

One (apparently ♀) example.

The abdomen is too much compressed for careful examination.



## Genus PAPILO, Linnæus.

28. *Papilio sthenelus*.

*Papilio sthenelus*, M<sup>r</sup> Leay, King's Surv. Austr. ii. p. 457. n. 133 (1827).

Three females.

29. *Papilio indicatus*, n. sp.

Wings dark smoky brown; primaries with the discal area paler, bounded within towards costa by two to four decreasing (externally notched) creamy white spots, fringe spotted with pale yellow; secondaries becoming almost black externally; a large, sordid, creamy whitish, externally deeply bisinuated patch near apex and parallel to the outer margin; an orange spot at anal angle surrounded with black, and with a blue linear crescent above it; two anal submarginal red lituræ; fringe varied with creamy whitish: wings below paler than above; secondaries with a submarginal series of seven large black spots, crossed by dull orange stripes and sprinkled with bluish atoms; the second, third, and fourth bounded internally by irregular white lunes, being the lower margin of the whitish patch of the upperside, the remainder of which is obscured by brown colouring, and only dimly visible. Expanse of wings 4 inches 6 lines.

Two females.

Allied to *P. capaneus*, of which it is probably the representative in New Guinea.

30. *Papilio ambracia*.

*Papilio ambracia*, Wallace, Trans. Linn. Soc. xxv. p. 54 (1865).

One pair.

## Family Hesperiidæ.

## Genus COBALUS, Hübner.

31. *Cobalus cæsina*.

*Hesperia cæsina*, Hewitson, Trans. Ent. Soc. 3rd ser. p. 491 (1866)

One female.

## Genus PAMPHILA, Fabricius.

32. *Pamphila augias*.

*Papilio augias*, Linnæus, Syst. Nat. i. 2, p. 794 (1767).

Two males.

## HETEROCERA.

Family **Agaristidæ**.Genus **AGARISTA**, Leach.33. *Agarista dæmonis*, n. sp.

Allied to *A. agricola*, but differing in the absence of the two orange bands of primaries and the carmine band of secondaries; the blue lines are also narrower; below, the carmine band of secondaries is represented by a small, dull rosy, squamose sub-anal spot, and the body is duller in colouring. Expanse of wings 2 inches 10 lines.

One female.

Family **Zygænidæ**.Subfamily *THYRETINÆ*, Butler.Genus **HYDRUSA**, Walker.34. *Hydrusa cingulata*.

*Hydrusa cingulata*, Butler, Journ. Linn. Soc. xii. p. 352 (1876).

One female.

Family **Lithosiidæ**.Genus **DEIOPEIA**, Stephens.35. *Deiopeia pulchella*.

Var. *Phalæna lotrix*, Cramer, Pap. Exot. ii. p. 20, pl. cix. fig. E (1779).

One pair.

Family **Palyadæ**.Genus **EUMELEA**, Duncan.36. *Eumelea rosalia*.

*Phalæna-Geometra rosalia*, Cramer, Pap. Exot. iv. p. 152, pl. cclcxviii. fig. F (1782).

One female.

Family **Microniidæ**.Genus **MICRONIA**, Guénée.37. *Micronia puellaria*?

*Micronia puellaria*, Walker, Lep. Het. Suppl. 5, p. 1641 (1866).

One pair.